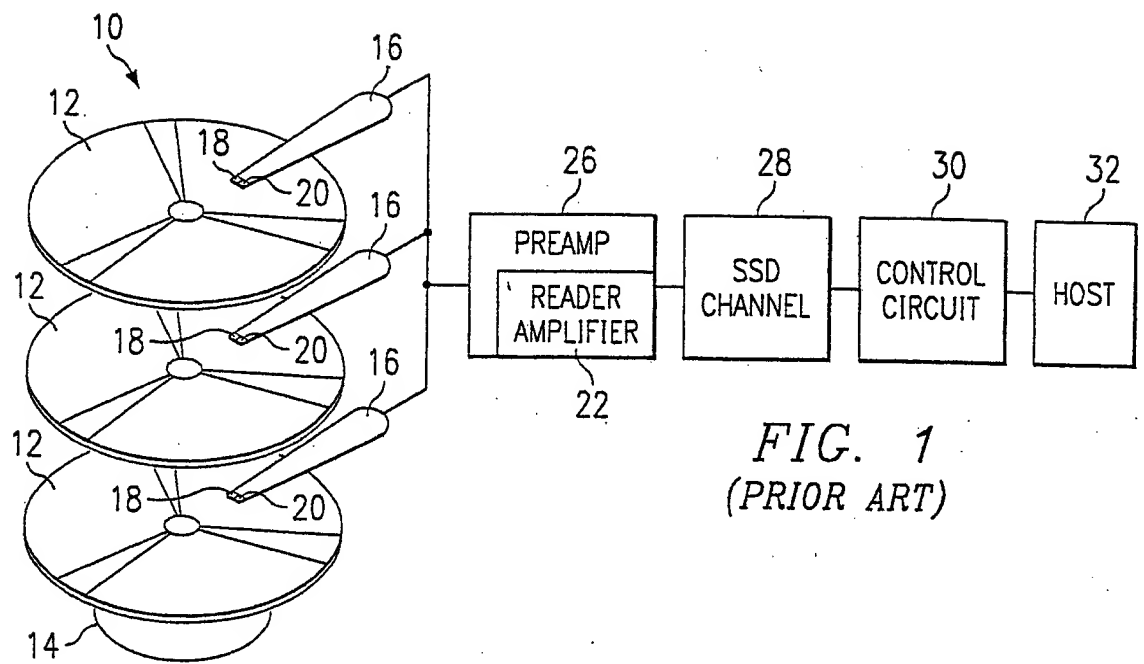


09899364.070201



*FIG. 1*  
(PRIOR ART)

09899364-070201

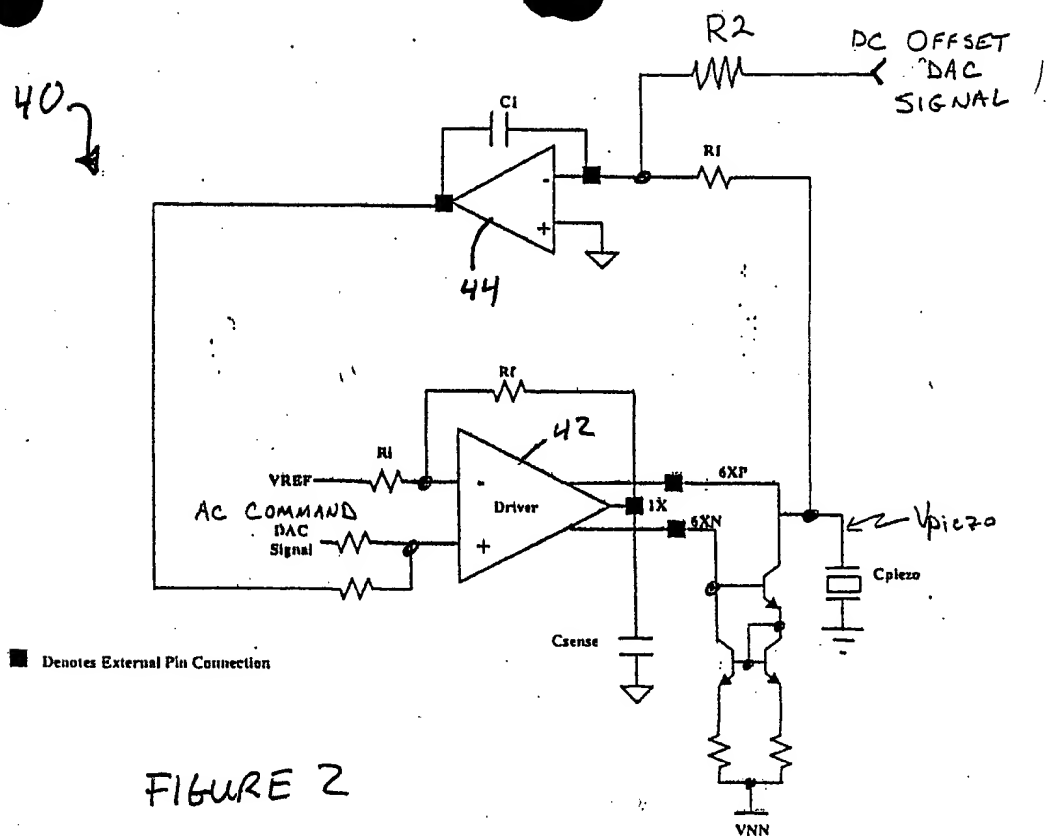


FIGURE 2

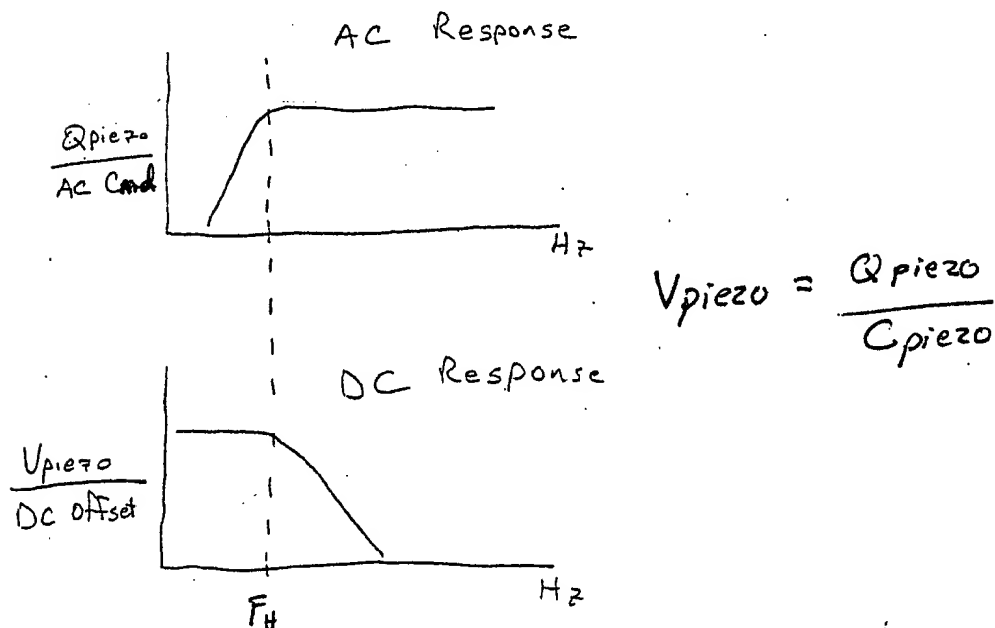
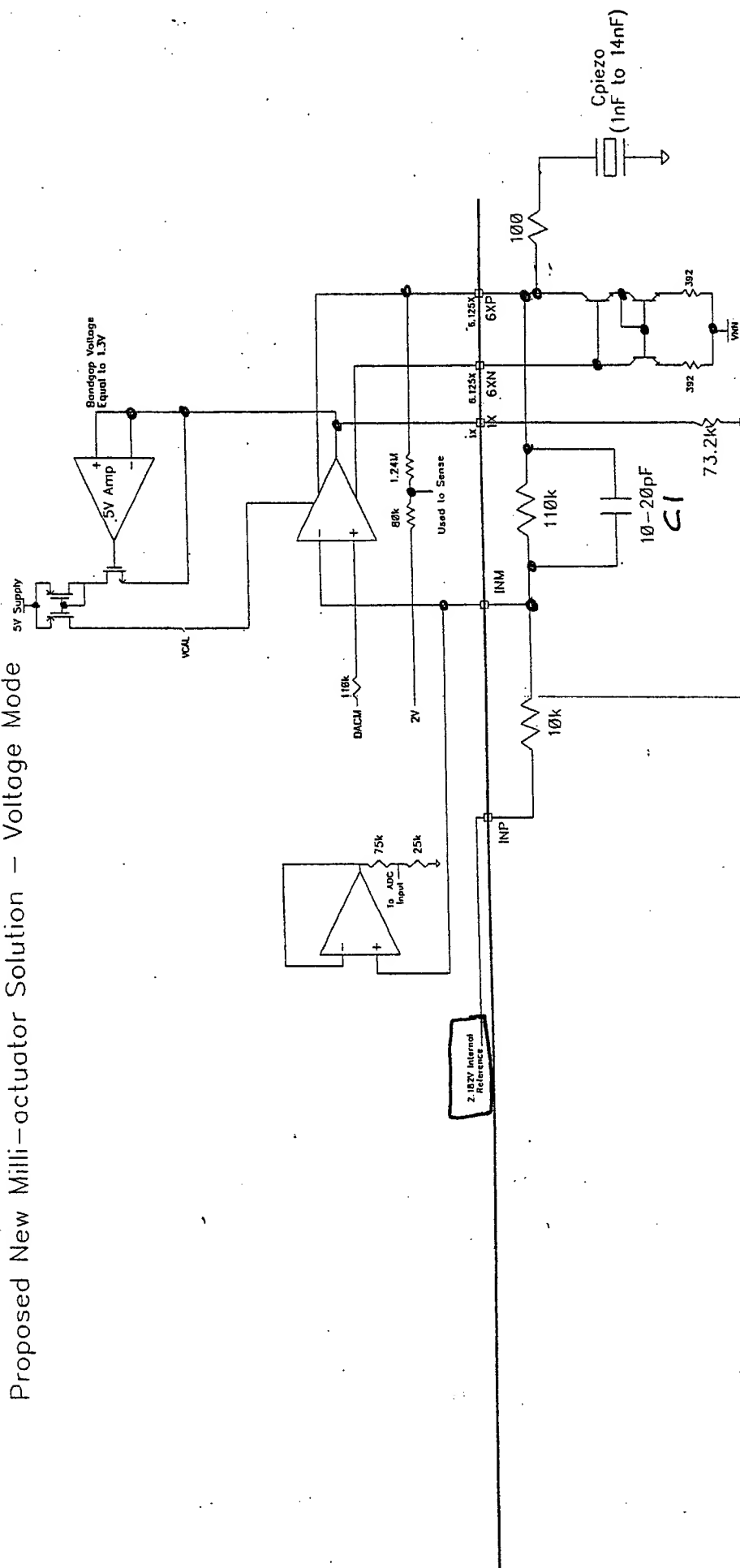


FIGURE 3





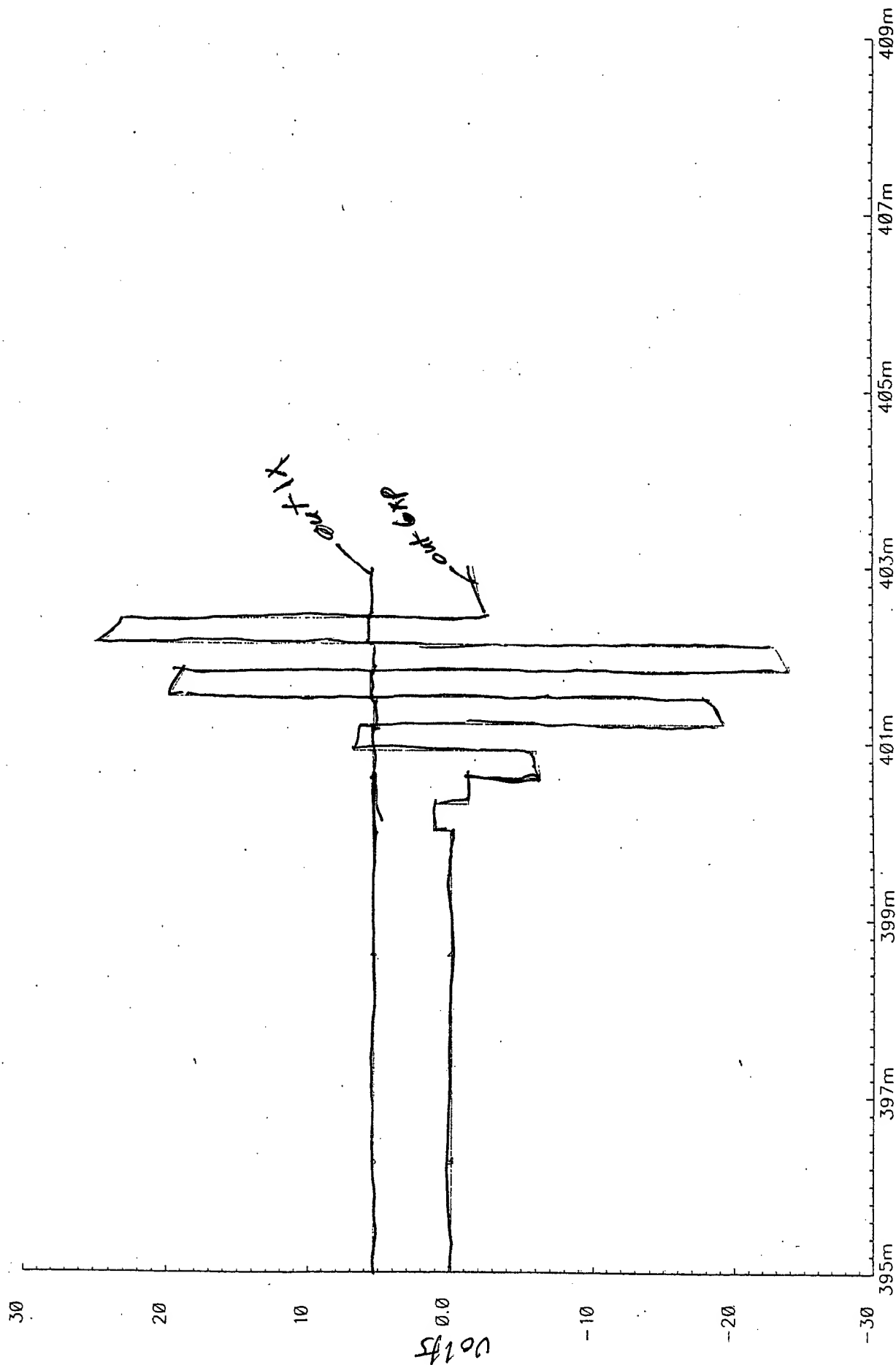
Proposed New Milli-actuator Solution – Voltage Mode



F16urE 6

FO2040-4966860

TRANSIENT Response



time (ms)

FIGURE 7

FO2040-19E66860

TRANSIENT Response

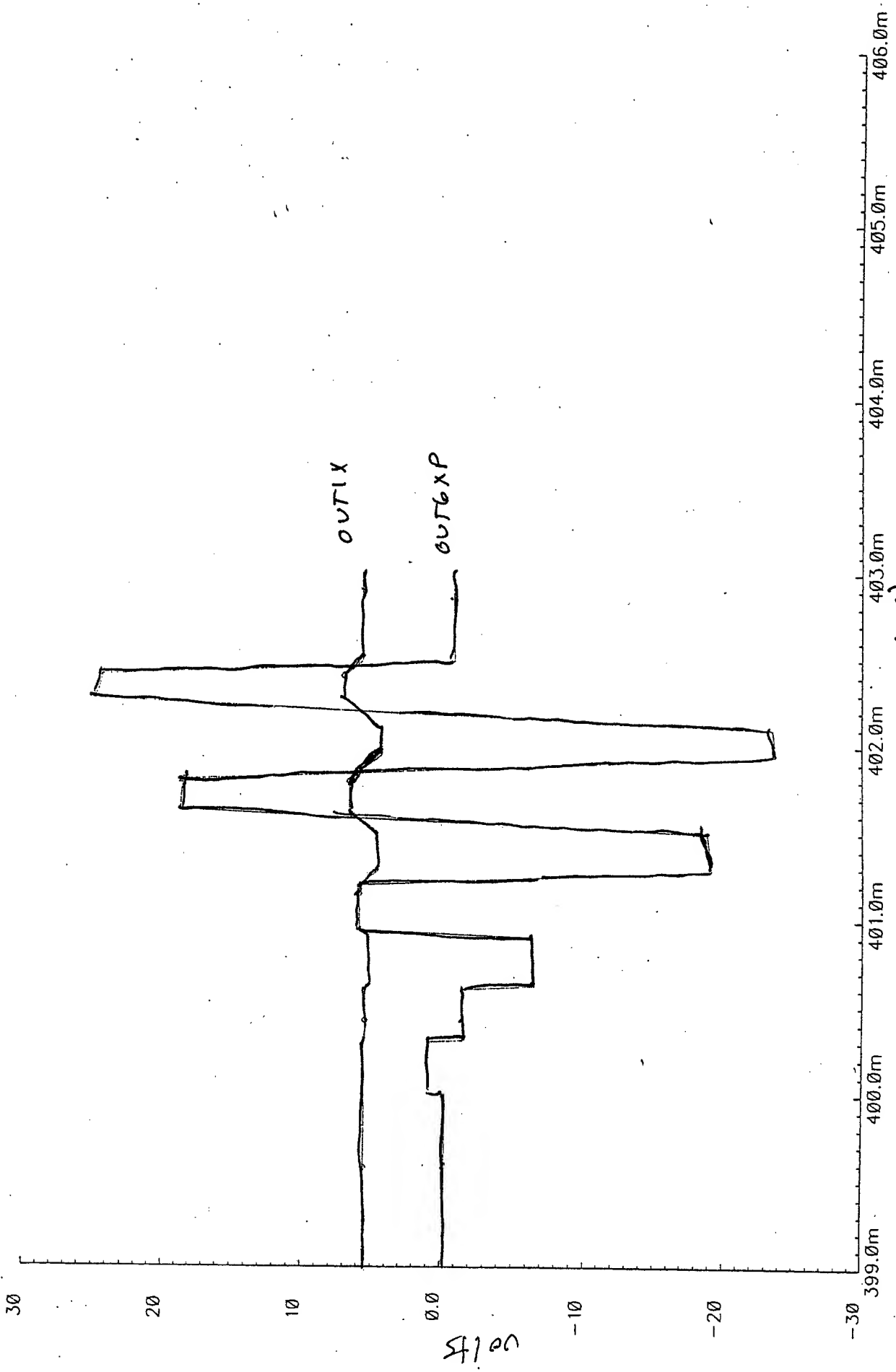
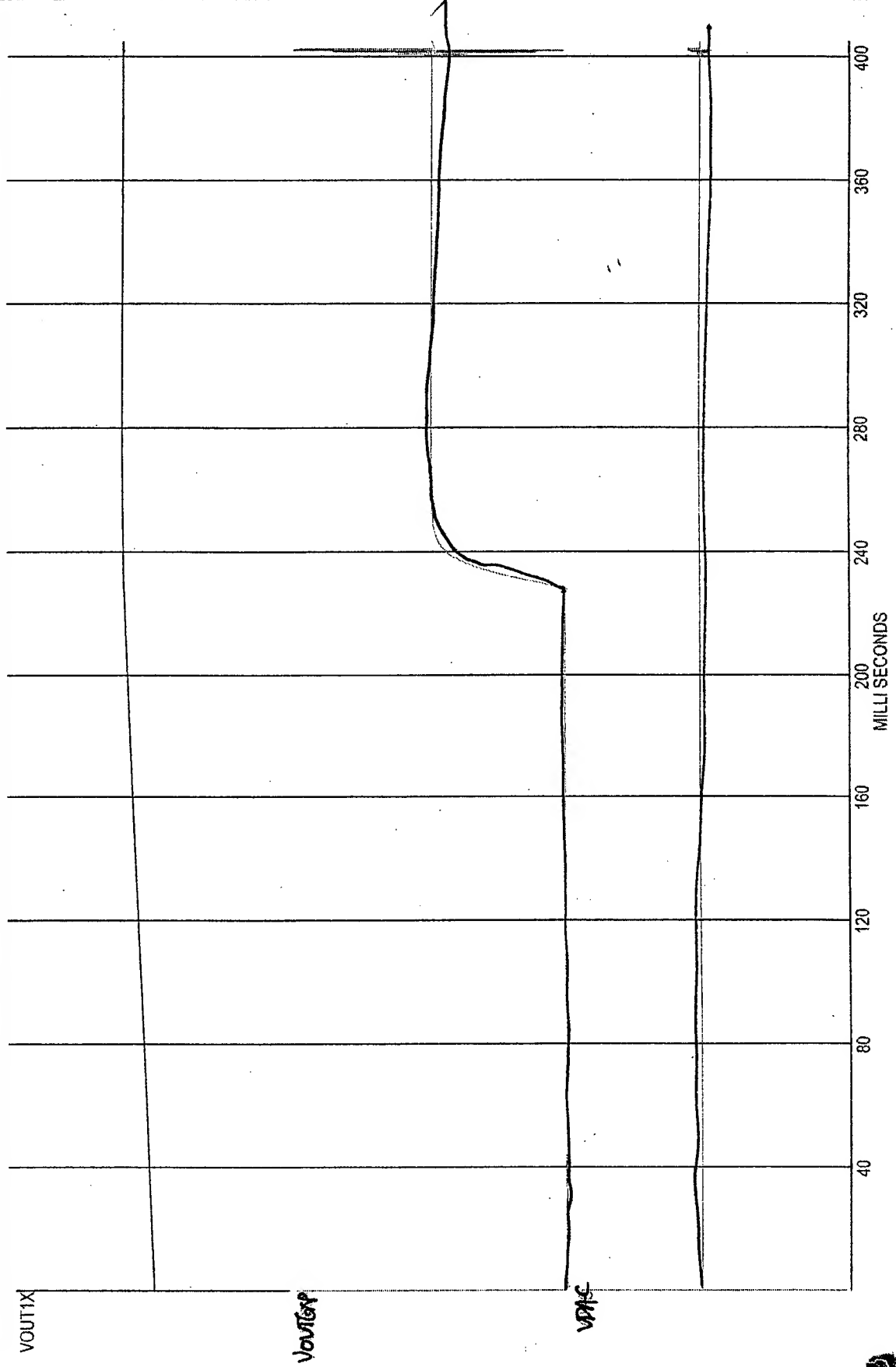


FIGURE 8

T02040-19E66860

SIMGRAPH v6.8

10/13/29-10:7:49

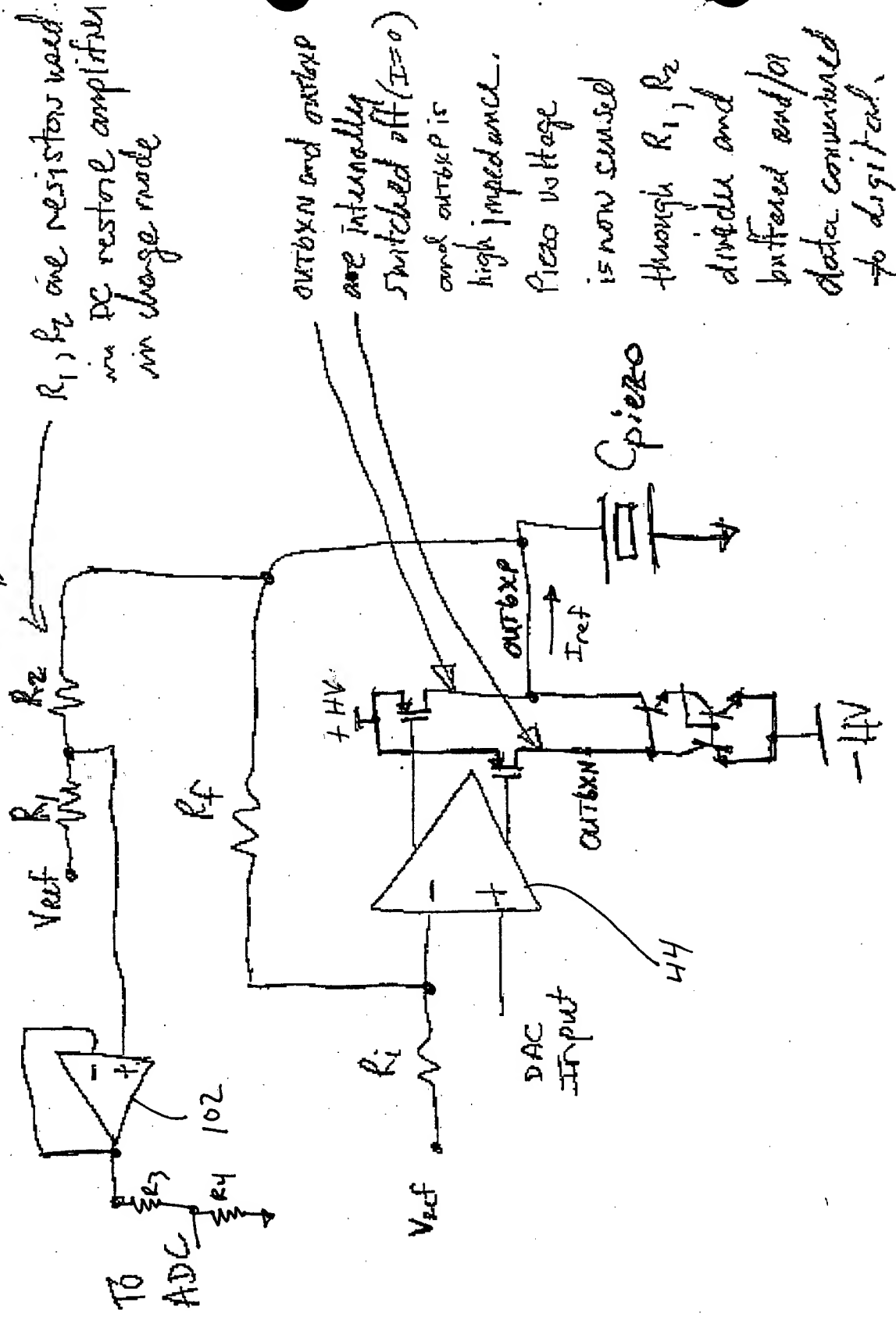


Texas Instruments Proprietary Information  
SES, WW ASIC

Figure 9



FO2020-1365700



$R_1, R_2$  are resistors used in DC restore amplifier in charge mode

$OUT6XN$  and  $OUT6XP$  are internally switched off ( $I=0$ ) and  $OUT6XP$  is high impedance. Piezo voltage is now sensed through  $R_1, R_2$  divider and buffered and/or data converted to digital.

Figure 10 Voltage Mode Output Sense

TRANSIENT Response

Sumul 2.1 - Voltage Mode - Max Load - CAL

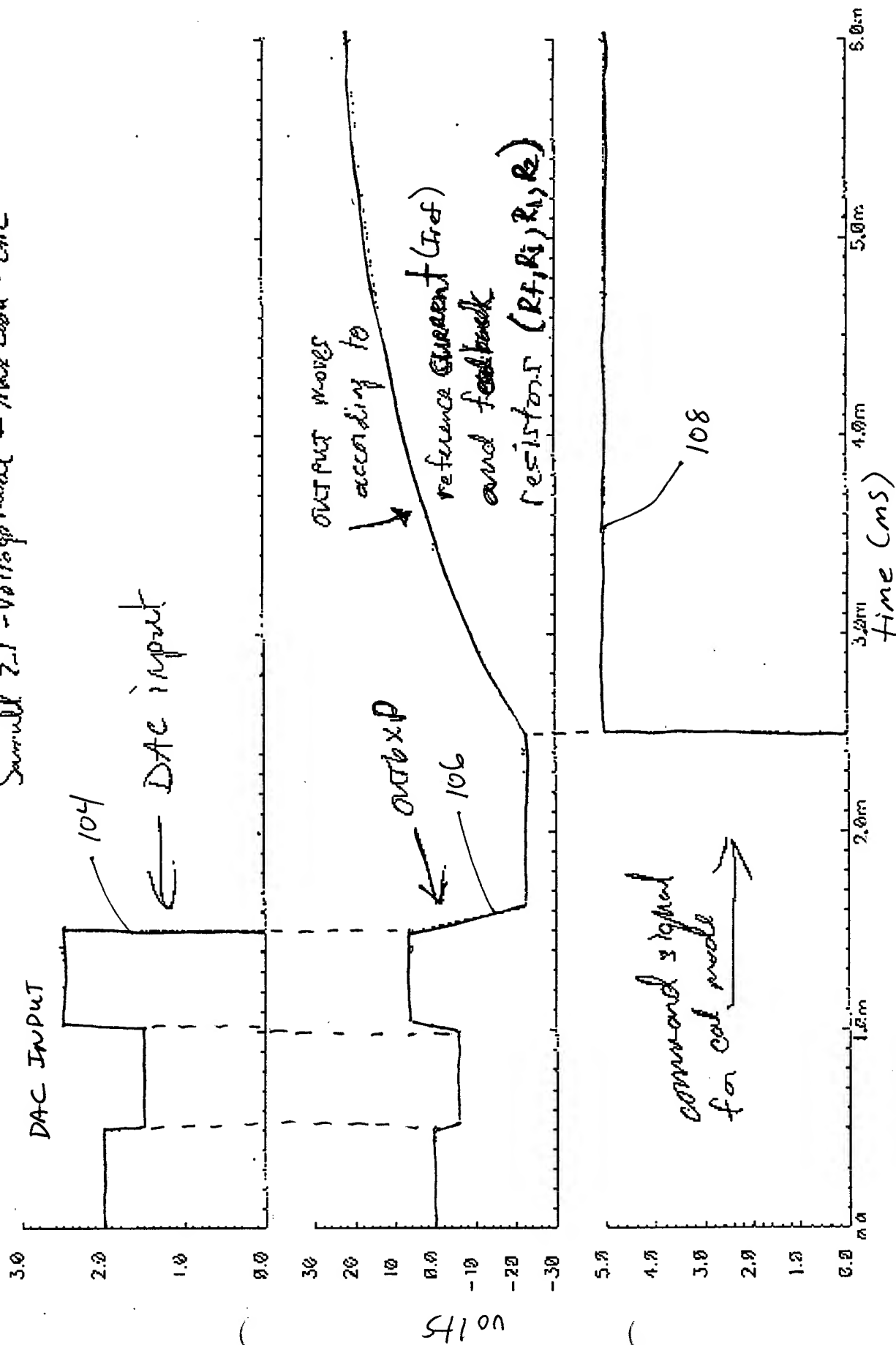


Figure 11